

TUESDAY SEPTEMBER 19, 2017					
Symposium:D1					
Session Title: NANOSTRUCTURES					
Chairperson: Artur Braun and Biao Cai				Submission ID	
AM2:11.00-13.00	11.00	In-situ Small Angle X-ray Scattering characterization of nanoporous materials for actuation and energy applications		686	Keynote
	11.20				
	11.40	Cubic? No, thanks!		2218	
	12.00	X-ray nano-diffraction analysis of 3D strain state in core-shell semiconductor nanowires		1950	
	12.20	Laboratory pre-screening of processes at the nanoscale for dedicated synchrotron in-situ SAXS/GISAXS experiments		1203	
	12.40	Monitoring TiO2 Crystallization Kinetics using Synchrotron Radiation Diffraction		43	
13.00-15.00	LUNCH				
Session Title: SPECTROSCOPIES-I					
Chairperson: Ullrich Pietsch and Mehmet Alper Sahiner				Submission ID	
PM1:15.00-17.00	15.00	XAS/XES studies of advanced materials		193	Highlight
	15.20	Chemical and morphological heterogeneity in zinc oxide thin films under humidity treatment		597	
	15.40	In situ hard x-ray photoemission spectroscopy of metal/PMN-PT interfaces		2086	
	16.00	Understanding the role of cerium oxide in H2O2 dissociation by HERFD-XANES		697	
	16.20	Combined XAS and XES study of Mn and Co valence and spin states in TbMn1-xCoxO3		553	
17.00-17.30	COFFE BREAK				

TUESDAY SEPTEMBER 19, 2017				
Symposium:D1				
Session Title: CATALYSIS & NANOSTRUCTURES				
Chairperson: Lucia Amidani and Oskar Paris			Submission ID	
PM2:17.30-19.30	17.30	Intermediates of electrochemical water oxidation: how they come and how they go	2545	Highlight
	17.50	In-situ Ultra-Small-Angle X-ray Scattering Study on Uniaxial Stretching of Physically Crosslinked Colloidal Crystal Prepared by Silica Nanoparticles Grafted by Hydrogen-Bonding Polymer	840	
	18.10	The effect of thermal treatment on the stress state and evolving microstructure of nano-multilayers: an in-situ high temperature XRD study	312	
	18.30	Fast in situ nanotomography at ID16B ESRF beamline: a new tool for dynamic characterization	179	
	18.50	Direct view on self healing in Fe-Au alloys by synchrotron X-ray nano-tomography	13	

WEDNESDAY SEPTEMBER 20, 2017				
Symposium:D1				
Session Title: TOMOGRAPHY				
Chairperson: Peter D. Lee and Ragnvald Mathiesen				Submission ID
AM2:11.00-13.00	11.00	Diffraction, phase and attenuation imaging for ductile damage	362	Keynote
	11.20			
	11.40	Higher-order iterative reconstruction of in situ dendritic growth	126	
	12.00	Solidification in 4D: from Dendrites to Eutectics	483	
	12.20	Synchrotron quantification of strain during shale fracture	610	
	12.40	Study of 3D damage and strain evolution in thin-sheet Al alloy materials by synchrotron laminography and digital volume correlation	1228	
13.00-15.00	LUNCH			
Session Title: TOMOGRAPHY & TOPOGRAPHY				
Chairperson: Peter Voorhees and Eric Maire				Submission ID
PM1:15.00-17.00	15.00	Shear dominated ductile damage and deformation: in situ laminography measurements	1329	
	15.20	A process replicator for in situ synchrotron X-ray characterisation of semi-solid materials processing	594	
	15.40	3D imaging of dislocation at the onset of plasticity in a gold sub-micron crystal	1060	
	16.00	The effect of strain rate and cenosphere volume fraction on the 3D failure mechanism in epoxy syntactic foams	1954	
	16.20	Nondestructive Materials Characterization in 3D by Laboratory Diffraction Contrast Tomography	2500	
	16.40	Imaging strain fields by ptychographic topography	1134	
17.00-17.30	COFFE BREAK			

WEDNESDAY SEPTEMBER 20, 2017				
Symposium:D1				
Session Title: SPECTROSCOPIES-II				
Chairperson: Andrea Di Cicco and Eric Collet			Submission ID	
PM2:17.30-19.30	17.30	Spectroscopic studies of advanced materials with nanobeams	214	Highlight
	17.50	Applications of synchrotron radiation-based XRD and XAFS in metallic glasses	1597	
	18.10	Structural Phases of Niobium Germanate Thin Films by DFT Assisted EXAFS Analyses	2532	
	18.30	Long-Term Structural Stability of Zn-doped Amorphous SnO2 Thin Films	1733	
	18.50	Evolution of the Solid Electrolyte Interphase in Li-ion electrodes probed by x-ray absorption and photoemission spectroscopy	883	

THURSDAY SEPTEMBER 21, 2017				
Symposium:D1				
Session Title: TIME-RESOLVED STUDIES				
Chairperson: Federico Boscherini and Jozef Keckes				Submission ID
AM2:11.00-13.00	11.00	Revealing multiscale photoswitching processes in spin-crossover molecular materials with ultrafast X-ray science	109	Keynote
	11.20			
	11.40	In situ SAXS registration with nanosecond time resolution	1789	
	12.00	In situ real time far field imaging of the (200) X-Ray diffraction peak of a single crystal superalloy during a high temperature creep test	927	
	12.20	In-situ synchrotron X-ray diffraction studies on solid-state phase transformations of an advanced high strength steel	607	
	12.40	Time resolved X-ray tomography and imaging for materials processing	993	
13.00-15.00	LUNCH			
Session Title: TOMOGRAPHY & DIFFRACTION TOMOGRAPHY				
Chairperson: Thilo Morgeneyer and Robert Atwood				Submission ID
PM1:15.00-17.00	15.00	Interplay between banding and the work hardening behaviour in a dual phase steel with improved formability	1592	Highlight
	15.20	Change of misorientation of individual crystallographic planes in fatigue of alloys by diffraction contrast tomography using ultrabright synchrotron radiation	59	
	15.40	Study of non-basal slip in Mg-Y alloy by in situ 3D-XRD	137	
	16.00	Application of tomography techniques to study stress corrosion cracking of Zr alloys in 3-dimensions	1945	
	16.20	Thermo-mechanical treatments of TiAl alloys studied in situ by high-energy X-ray diffraction	1239	
	16.40	MagDS furnace: an in situ temperature gradient stage for 4D X-ray imaging of directional solidification	830	
17.00-17.30	COFFE BREAK			

THURSDAY SEPTEMBER 21, 2017		
Symposium:D1		
Session Title: <b>MAGNETIC &amp; FERROELECTRIC MATERIALS</b>		
Chairperson: <b>Makis Angelakeris and Maria Katsikini</b>		Submission ID
PM2:17.30-19.30	<b>17.30</b>	Soft-phonon-driven orbital order in CaMn7O12: an x-ray diffuse and inelastic scattering study 928
	<b>17.50</b>	Synchrotron X-ray diffraction studies of NdMn2O5 2125
	<b>18.10</b>	High throughput assessments for accelerated permanent magnet development 1928
	<b>18.30</b>	Spatially resolved investigation of all optical magnetization switching in FeTb alloy 2450
	<b>18.50</b>	The wonders of Co films intercalated below Graphene 149

FRIDAY SEPTEMBER 22, 2017					
Symposium:D1					
Session Title: SPECTROMICROSCOPY & IMAGING					
Chairperson: Andreas Stark and Gema Martinez Criado				Submission ID	
AM2:11.00-13.00	11.00	Towards ambient pressure in the characterization of materials at the micro- and nano-scale by scanning photoemission imaging and spectromicroscopy		455	Highlight
	11.20	Ultra-high speed hard X-ray imaging at ESRF: Applications to engineering materials		564	
	11.40	Tomographic coherent diffraction imaging at the ESRF beamline ID10		1087	
	12.00	Measurement of stress field in deformed material at the micron scale: combining Laue Microdiffraction with Digital Image Correlation, and related accuracy		894	
	12.20	Microstructure evolution during fast cooling studied by in situ X-ray techniques		1585	
13.00-15.00	LUNCH				
Session Title: INSTRUMENTATION					
Chairperson: Federico Zontone and Evangelia Moshopoulou				Submission ID	
PM1:15.00-17.00	15.00	Pulse picker for x-ray radiation driven by Surface Acoustic Wave		783	
	15.20	Combining a nine-crystal multianalyzer stage with a Pilatus3 X CdTe detector for high resolution X-ray powder diffraction at ESRF-ID22		867	
	15.40	Sub-50nm Cross-Sectional X-ray Nanodiffraction Analysis of Microstructure and Strain in Thin Films		1099	
	16.00	Material Characterization on VESPERs Beamline at CLS		1752	
	16.20	Mobile Pulsed Laser Deposition equipment for in situ investigation at Synchrotron Radiation Facilities		2492	
17.00-17.30	COFFE BREAK				